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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,818	09/16/2003	Gordon G. Guay	08935-298001 / M-5032	3443
26161	7590	12/24/2009		
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022				EXAMINER
				CHUO, TONY SHENG HSILANG
ART UNIT		PAPER NUMBER		
		1795		
NOTIFICATION DATE		DELIVERY MODE		
12/24/2009		ELECTRONIC		

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* GORDON G. GUAY

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Appeal 2009-009378  
Application 10/664,818  
Technology Center 1700

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Decided: December 22, 2009

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Before JEFFREY T. SMITH, LINDA M. GAUDETTE, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision finally rejecting claims 1-26 (Final Office Action, mailed Nov. 15,

2007), the only claims pending in the application.<sup>1</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

#### STATEMENT OF THE CASE

The invention relates to a fuel cell and method of use therefor to power a portable electronic device. The Examiner relies on the following evidence to establish unpatentability (Examiner's Answer ("Ans."), mailed Sep. 17, 2008, p. 2):

Lawrence	US 2002/0197522 A1	Dec. 26, 2002
Hirsch	US 2004/0209133 A1	Oct. 21, 2004
Deinzer <sup>2</sup>	WO 03/043112 A1	May 22, 2003

Appellant requests review of the following grounds of rejection (Appeal Brief ("App. Br."), filed Jun. 23, 2008, pp. 4-5):

1. claims 11-15 and 24 under 35 U.S.C. § 102(b) as anticipated by Deinzer;
2. claims 1-10 and 16-22 under 35 U.S.C. § 103(a) as unpatentable over Lawrence in view of Hirsch;
3. claims 23 and 25 under 35 U.S.C. § 103(a) as unpatentable over Deinzer as applied to claim 11 and further in view of Lawrence; and
4. claim 26 under 35 U.S.C. § 103(a) as unpatentable over Deinzer as applied to claim 11 and further in view of Hirsch.

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<sup>1</sup> An oral hearing was held telephonically on Dec. 8, 2009.

<sup>2</sup> Appellant has not objected to the Examiner's reliance on US 2006/0172171 A1 as the English language equivalent.

## SUMMARY OF DECISION

We have considered the arguments of the Examiner and Appellant and determine that Appellant has not identified reversible error in the Examiner's rejections for the reasons stated in the Examiner's Answer. We add the following discussion for the sake of completeness.

## ISSUES, FINDINGS OF FACT, AND ANALYSIS

### *Rejection of claims 11-15 and 24 under 35 U.S.C. § 102(b) as anticipated by Deinzer*

Independent claim 11, reproduced from the Claims Appendix to the Appeal Brief, reads as follows:

11. A fuel cartridge that supplies a source of fuel to a fuel cell, the fuel cartridge comprising:

a housing, the housing containing and in direct contact with a liquid source of an oxidizable fuel and having at least a portion of a wall of the housing being comprised of a thermally conductive material; and

a fuel egress port supported by the housing with the at least a portion of a wall of the housing sinking heat generated from external components to enhance a delivery rate of the liquid source of oxidizable fuel in a vapor phase to the egress port of the container.

Appellant presents separate arguments with respect to the following groups of claims: (1) claims 11, 12, 15, and 24 (App. Br. 8-10); (2) claim 13 (App. Br. 11); and (3) claim 14 (App. Br. 11-12). However, the arguments made with respect to all three claim groupings is based on Appellant's underlying contention that Deinzer fails to disclose "a housing . . . having at least a portion of a wall . . . comprised of a thermally conductive material" as recited in independent claim 11. Therefore, we identify the following issue as dispositive of the appeal as to all three claim groupings:

Has Appellant shown reversible error in the Examiner’s finding that the claim term “housing” reads on both Deinzer’s housing 1b and inner sleeve 312?

We answer this question in the negative.

Appellant argues that because Deinzer specifically identifies element 1b as a “housing,” it is improper for the Examiner to construe Deinzer element 312, i.e., an “inner sleeve,” as forming part of Deinzer’s housing. (App. Br. 9) (“[T]he examiner’s contention . . . is in clear contradiction of how Deinzer describes the fuel cartridge and how the inner sleeve 312 functions.”)

Contrary to Appellant’s contention the law of anticipation does not require that the reference teach what the subject patent application teaches. *Hewlett-Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1324 n.6 (Fed. Cir. 2003) (“The anticipation analysis asks solely whether the prior art reference discloses and enables the claimed invention, and not how the prior art characterizes that disclosure.”). It is only necessary that the claims, as construed, “read on” something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or fully met by it. *See In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997); *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (Fed. Cir. 1983). “[T]he PTO must give claims their broadest reasonable construction consistent with the specification. . . . Therefore, we look to the specification to see if it provides a definition for claim terms but otherwise apply a broad interpretation.” *In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007).

Appellant’s arguments are based on a contention that Deinzer’s element 1b does not anticipate the claimed “housing.” (See App. Br. 8-12

and Reply Brief (“Rep. Br.”), filed Nov. 17, 2008, pp. 1-3.) However, Appellant has not provided any persuasive evidence in support of, nor do we find any basis in the Specification or claims for a narrow interpretation of the claim term “housing” as limited to Deinzer’s element 1b and/or excluding Deinzer’s inner sleeve 312. Because Appellant has not addressed the Examiner’s findings that the argued claim limitations related to the “housing” are anticipated by the combination of Deinzer’s elements 1b and 312 (Ans. 3 and 6-9; Rep. Br. 3 (“The examiner misconstrues Deinzer arguing that the inner sleeve ‘312’ . . . can be construed as being part of the housing of the fuel cartridge of Deinzer.”)), Appellant has not persuasively argued that the Examiner reversibly erred in rejecting claims 11-15 and 24.

*Rejection of claims 1-10 and 16-22 under 35 U.S.C. § 103(a)  
as unpatentable over Lawrence in view of Hirsch*

Independent claims 1 and 16, reproduced from the Claims Appendix to the Appeal Brief, read as follows:

1. A container that supplies a source of fuel to a direct methanol fuel cell, the container comprising:

a housing, the housing having at least a portion of a wall of the housing being comprised of a thermally conductive material;

a fuel egress port supported by the housing; and

a surface area enhanced planar vaporization membrane residing in the container.

16. A method comprises:

disposing a fuel cartridge into a compartment of an electronic device such that a portion of a wall of a housing of the fuel cartridge that is comprised of a thermally conductive material is placed in thermal

communication with a heat generating component in the electronic device to enable a vapor phase of the fuel in the housing to egress from the cartridge.

Appellant presents separate arguments with respect to the following groups of claims: (1) claims 1-9 (App. Br. 12-15); (2) claim 10 (App. Br. 15) (3) claims 16-18 (App. Br. 15-16); and (4) claim 19 (App. Br. 16).

Appellant has the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006). Appellant's arguments with respect to claim groups (2)-(4) are directed to features not recited in the claims and/or fail to address the facts and reasons relied on by the Examiner in rejecting the claims (*see* Ans. 3-5 and 10-11). For example, Appellant argues that the references do not disclose or suggest various claim features, but does not address the Examiner's findings with respect to the knowledge of the ordinary artisan (*see, e.g.*, Ans. 11 (knowledge of ordinary artisan with respect to components of computer laptops)).<sup>3</sup> Appellant does not present evidence to refute the Examiner's findings that certain claim features are inherent. (*See, e.g.*, Rep. Br. 6 ("Appellant does not dispute certain of the inherency positions taken by the examiner. . . . However, the inherent characteristics . . . were not taken into consideration by . . . the references.").)<sup>4</sup> Appellant also

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<sup>3</sup> *See DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006) ("Our suggestion test is in actuality quite flexible and not only permits, but *requires*, consideration of common knowledge and common sense").

<sup>4</sup> *E.g.*, compare Ans. 10 (explaining that claim 10 does not "require placing the fuel cartridge next to a component that dissipates heat") with Rep. Br. 5-6. Where the Examiner establishes a reasonable assertion of inherency and thereby evinces that a claimed process appears to be identical

argues that claim limitations are not disclosed essentially because the references fail to describe various components using the identical language recited in the claims. However, Appellant fails to address the Examiner's findings of correspondence between certain prior art elements and various claim limitations.<sup>5</sup> Therefore, for the reasons fully explained in the Answer, the separate arguments presented by Appellant with respect to claim groups (2)-(4) fail to persuade us of reversible error in the Examiner's obviousness determination as to claims 10, 16-18, and 19.

We do, however, determine that Appellant's arguments presented in connection with claim group (1) raise the following issues for our consideration:

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to a process disclosed by the prior art and/or that the products claimed by the applicant and disclosed in the prior art appear to be the same, the burden is properly shifted to the applicant to show that they are not. *See In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990); *In re Best*, 562 F.2d 1252, 1254-56 (CCPA 1977).

[W]here the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

*In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997) (quoting *In re Swinehart*, 439 F.2d 210, 213 (C.C.P.A.1971)). Cf. *Intel Corp. v. U.S. Int'l Trade Comm'n*, 946 F.2d 821, 832 (Fed. Cir. 1991) (functional language in an apparatus claim is interpreted as requiring that the apparatus possess *the capability* of performing the recited function).

<sup>5</sup>See *In re Danly*, 263 F.2d 844, 847 (CCPA 1959) (regardless of the terminology used by the reference, claims are obvious where the prior art discloses or suggests the claimed structure).

1. Has Appellant shown reversible error in the Examiner's finding that Lawrence discloses a fuel egress port supported by the housing?
2. Has Appellant shown reversible error in the Examiner's finding that Hirsch discloses a surface enhanced planar vaporization membrane?
3. Has Appellant shown that the Examiner's findings are insufficient to establish that it would have been obvious to have modified Lawrence to include a surface area enhanced planar vaporization membrane as taught by Hirsch?

We answer these questions in the negative for the reasons explained below.

Issue 1: Has Appellant shown reversible error in the Examiner's finding that Lawrence discloses a fuel egress port supported by the housing?

The Examiner finds that Lawrence discloses a housing, fuel cartridge 39, and a fuel egress port, exit 88a, as claimed. (Ans. 3-4 (relying on Lawrence ¶¶ [0093-0094]).)

Appellant relies on Lawrence Figures 7a and 10 and what appears to be quoted language from Lawrence<sup>6</sup> to establish that Lawrence's exit port is supported on the expandable fuel bladder 86, not on a housing as required by the claims. (App. Br. 13-14.)

Lawrence ¶¶ [0093-0094] read: "Canister 92a encloses expandable fuel bladder 86a . . . . Sealable exit port 88a fluidly communicates with fuel bladder 86a."

We find that the evidence clearly favors the Examiner's finding that Lawrence discloses a fuel egress port supported by a housing as recited in

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<sup>6</sup> No citation has been provided. (See App. Br. 13.)

appealed claims 1-9 and 16-19. In particular, like the Examiner, we understand the foregoing quotation as indicating that the port 88a and bladder 86a are “secured to” or “supported by” other elements, i.e., the canister 92a which allow them to “fluidly communicate[s] with” each other. Appellant has not convincingly explained why the relied-upon disclosure in Lawrence teaches otherwise. (*See Ans. 9; Rep. Br. 4 (“Item 88 in Fig. 7 appears to protrude through the item 92 but does not appear to be supported on the item” (emphasis added)).*)

Issue 2: Has Appellant shown reversible error in the Examiner’s finding that Hirsch discloses a surface enhanced planar vaporization membrane?

The Examiner interprets the claimed “surface area enhanced planar vaporization membrane” as “any membrane that is capable of causing liquid methanol fuel to undergo a phase change to a vaporous fuel.” (Ans. 9-10.) Based on this interpretation, the Examiner finds that the claim limitation is met by Hirsch’s methanol delivery film (“MDF”). (Ans. 4.)

An Examiner’s statement is accepted as true when an appellant fails to question its accuracy or to present contradicting evidence. *See, e.g., In re Fox*, 471 F.2d 1405, 1407 (CCPA 1973) (affirming the Board’s decision: “In this court appellant has not denied the existence of the facts on which the examiner rested his obviousness rejection nor the added facts of which the board took judicial notice.”); *In re Kunzmann*, 326 F.2d 424, 425 n.3 (CCPA 1964) (“[T]he examiner appears to have considered thoroughly this assertion, and to have found otherwise. Since appellant has not shown this finding to be clearly erroneous, we accept it as fact.”).

Appellant concedes that Hirsch discloses an MDF membrane, but maintains that there is no disclosure that it is “surface enhanced.” (App. Br.

14.) Appellant has not argued or directed us to any evidence in support of a narrower claim interpretation than that applied by the Examiner. Therefore, Appellant has a burden to explain why, or provide persuasive evidence which demonstrates that the Examiner erred in finding that Hirsch's membrane is capable of causing liquid methanol fuel to undergo a phase change to a vaporous fuel. Appellant's unsupported argument is not sufficient to meet this burden.

Issue 3: Has Appellant shown that the Examiner's findings are insufficient to establish that it would have been obvious to have modified Lawrence to include a surface area enhanced planar vaporization membrane as taught by Hirsch?

Appellant argues that the Examiner reversibly erred because the Examiner failed to explain how to place Hirsch's membrane into Lawrence's bladder arrangement. (App. Br. 14.)

The Examiner points out that appealed claim 1 does not structurally limit the arrangement of the membrane in the claimed container. (Ans. 10.)

“The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.” *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). As explained by the Supreme Court, “[i]f a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. *KSR Int'l. Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). “A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 421.

Appellant's argument is not persuasive of reversible error because Appellant has not explained why the Examiner erred in finding that it would have been within the level of skill of the ordinary artisan to "modify" (Ans. 4, last line) Lawrence's fuel cartridge so as to include a vaporization membrane as suggested by Hirsch. (*See* Ans. 10.)

*Rejection of claims 23 and 25 under 35 U.S.C. § 103(a) as unpatentable over Deinzer as applied to claim 11 and further in view of Lawrence*

Appellant argues that the combined teachings of Deinzer and Lawrence fail to disclose the limitations of claims 23 and 25. (App. Br. 17-24.) This argument alone is not persuasive of reversible error because it fails to specifically identify error in the facts and reasons relied on by the Examiner in rejecting the claims. *See* discussion *supra* pp. 6-7.

*Rejection of claim 26 under 35 U.S.C. § 103(a) as unpatentable over Deinzer as applied to claim 11 and further in view of Hirsch*

Appellant argues that the Examiner reversibly erred in rejecting claim 26 because the Examiner has not explained how to modify Deinzer to include Hirsch's membrane. (App. Br. 18.) This argument is not persuasive for the reasons explained above in connection with the second ground of rejection, issue 2.

### CONCLUSION

Appellant has not identified reversible error in the Examiner's rejections. Therefore, we affirm the decision of the Examiner rejecting claims 1-26.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

**AFFIRMED**

PL Initial:  
sld

FISH & RICHARDSON PC  
P.O. BOX 1022  
MINNEAPOLIS MN 55440-1022